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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/579,390

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EXAMINER

WANG-HURST, KATHY W

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/579,390	Applicant(s) ECKERT ET AL.	
	Examiner KATHY WANG-HURST	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 15-29 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 15-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Balachandran et al. (US 2005/0054331) in view of Choi et al. (US 2004/0180675).

Regarding claim 15, Balachandran discloses a method for transmission of data in a radio communication system having subscriber stations(see at least Abstract, [0033]-[0034]), comprising: informing the subscriber stations of a service which is provided for several subscribers (i.e. see [0030][0032][0033][0034] informing the mobile station of broadcast-multicast service content subscribed by the user), prior to the transmission of useful information (at least see [0030][0036]an indicators transmitted on QPCH precede BSPM transmitted on PCH/F-CCCH), by providing, via a broadcast/multicast service-dedicated paging indicator channel ([0010][0033][0035] a quick paging channel that transmits indicators for BSPM), a paging indicator for service control information on a

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service control channel ([0010][0033][0034] paging indicator for BSPM on PCH or F-BCCH; BSPM is the service control information defined in [0034]).

Balachandran discloses broadcast/multicast service ([0028]) but does not explicitly disclose multimedia broadcast/multicast service (MBMS). In analogous art, Choi discloses MBMS ([0046][0047]).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the invention of Balachandran, to deliver broadcast/multicast service in multimedia, as taught by Choi, thus allowing supporting of high-capacity data such as real-time image and voice ([0005]).

Regarding claim 24, Balachandran discloses a base station ([0024]) for transmission of data in a radio communication system, comprising: means for informing subscriber stations prior to transmission of useful information as a service that is provided for several subscribers ([0033]-[0036]), and means for creating and transmitting ([0036]), to subscriber stations ([0038]), paging indicators for service control information on a service control channel, using a broadcast/multicast service dedicated paging indicator channel ([0010][0033][0035]).

Balachandran discloses broadcast/multicast service ([0028]) but does not explicitly disclose multimedia broadcast/multicast service (MBMS). In analogous art, Choi discloses MBMS ([0046][0047]).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the invention of Balachandran, to deliver

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broadcast/multicast service in multimedia, as taught by Choi, thus allowing supporting of high-capacity data such as real-time image and voice ([0005]).

Regarding claim 28, Balachandran discloses a subscriber station (i.e. Abstract and [0038]) for performing a method for transmission of data, comprising: means for receiving paging indicators at said subscriber station using a broadcast/multicast service dedicated paging indicator channel ([0010][0033] [0035][0038]), with either paging indicators of discontinuous reception cycles on the broadcast/multicast service dedicated paging indicator channel being periodically received or paging indicator information being received on a cell paging indicator channel to acquire a paging indicator on the broadcast/multicast service dedicated paging indicator channel([0033]-[0036]), and with the paging indicators provided for service control information on a service control channel ([0033][0034]).

Balachandran discloses broadcast/multicast service ([0028]) but does not explicitly disclose multimedia broadcast/multicast service (MBMS). In analogous art, Choi discloses MBMS ([0046][0047]).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the invention of Balachandran, to deliver broadcast/multicast service in multimedia, as taught by Choi, thus allowing supporting of high-capacity data such as real-time image and voice ([0005]).

Regarding claim 29, Balachandran discloses a radio communication system for transmission of data, comprising: at least one base station ([0009]) including means for informing subscriber stations prior to transmission of useful information as a

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service that is provided for several subscribers ([0033]-[0036]), and means for creating and transmitting, to subscriber stations, paging indicators for service control information on a service control channel, using a broadcast/multicast service dedicated paging indicator channel ([0033]-[0036]); and at least one subscriber station including means for receiving paging indicators at said subscriber station using the broadcast/multicast service dedicated paging indicator channel([0038]), with either paging indicators of discontinuous reception cycles on the broadcast/multicast service dedicated paging indicator channel being periodically received or paging indicator information being received on a cell paging indicator channel to acquire a paging indicator on the broadcast/multicast service dedicated paging indicator channel ([0033]-[0036]).

Balachandran discloses broadcast/multicast service ([0028]) but does not explicitly disclose multimedia broadcast/multicast service (MBMS). In analogous art, Choi discloses MBMS ([0046][0047]).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the invention of Balachandran, to deliver broadcast/multicast service in multimedia, as taught by Choi, thus allowing supporting of high-capacity data such as real-time image and voice ([0005]).

Regarding claims 16-18 and 25-26, combination of Balachandran and Choi discloses the method and apparatus of transmitting several discontinuous reception cycles of paging indicators in the multimedia broadcast/multicast service dedicated paging indicator channel and cycles having various repetition rates.

Regarding claim 19 and 27, combination of Balachandran and Choi discloses a method in accordance with claim 18, wherein at least one paging indicator on the broadcast/multicast service dedicated paging indicator channel contains service identification information for at least one of various services and various types of service.

Balachandran discloses broadcast/multicast service ([0028]) but does not explicitly disclose multimedia broadcast/multicast service (MBMS). In analogous art, Choi discloses MBMS ([0046][0047]).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the invention of Balachandran, to deliver broadcast/multicast service in multimedia, as taught by Choi, thus allowing supporting of high-capacity data such as real-time image and voice ([0005]).

Regarding claim 20, Balachandran discloses a method in accordance with claim 19, wherein said informing further comprises receiving paging indicator information on a cell paging indicator channel at the subscriber station to acquire the paging indicator using the broadcast/multicast service dedicated paging indicator channel ([0010][0033][0035]).

Balachandran discloses broadcast/multicast service ([0028]) but does not explicitly disclose multimedia broadcast/multicast service (MBMS). In analogous art, Choi discloses MBMS ([0046][0047]).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the invention of Balachandran, to deliver

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broadcast/multicast service in multimedia, as taught by Choi, thus allowing supporting of high-capacity data such as real-time image and voice ([0005]).

Regarding Claim 21, Balachandran discloses a method in accordance with claim 20, wherein the paging indicator information on the cell paging indicator channel contains several bits for indicating service information on the broadcast/multicast service dedicated paging indicator channel(i.e. [0042][0044]).

Balachandran discloses broadcast/multicast service ([0028]) but does not explicitly disclose multimedia broadcast/multicast service (MBMS). In analogous art, Choi discloses MBMS ([0046][0047]).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the invention of Balachandran, to deliver broadcast/multicast service in multimedia, as taught by Choi, thus allowing supporting of high-capacity data such as real-time image and voice ([0005]).

Regarding claim 22, Balachandran discloses a method in accordance with claim 21, wherein the paging indicator information on the cell paging indicator channel includes an indication of at least one of a service class and a paging-specific sequence number ([0041][0048]).

Regarding claim 23, combination of Balachandran and Choi discloses a method in accordance with claim 19, wherein said informing further comprises periodically receiving paging indicators of discontinuous cycles on the multimedia broadcast/multicast service dedicated paging indicator channel.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kim et al. (US 2004/0087320) discloses a method of transmitting and receiving control message in a mobile communication system providing multimedia broadcast/multicast service.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KATHY WANG-HURST whose telephone number is (571) 270-5371. The examiner can normally be reached on Monday-Thursday, 7:30am-5pm, alternate Fridays, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KATHY WANG-HURST/
Examiner, Art Unit 2617

/NICK CORSARO/
Supervisory Patent Examiner, Art Unit 2617